

all patients with general paresis are demented, often with periodic convulsions and progressive vegetative degeneration until they die.

Because syphilis is pleomorphic in its presentation, unexplained psychiatric disease should raise the suspicion of lues. Results of careful neurologic examination, especially in the early stages of the disease, may be entirely normal even in the face of pronounced mental changes.⁷ The serum FTA-ABS is positive in 95 percent or more of all patients with general paresis.⁸ Lumbar puncture may show a positive VDRL, although only 57 percent of patients with neurosyphilis in one series had CSF serology positive.² A positive serum FTA-ABS, with CSF mononuclear pleocytosis or an elevated protein value (or both) confirm the diagnosis for all practical purposes and should lead to appropriate therapy.

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Another Method of Water Purification for Travelers

TO THE EDITOR: The article by Zemlyn, Wilson and Hellweg¹ on iodine for water purification in the August 1981 issue discussed crystalline iodine and organic iodine tablets, tetraglycine hydroperiodide, for use by backpackers for purification of drinking water. They recommended the latter.

The authors' point may well be valid, but there appears to be a much better method than either of those discussed. Povidone-iodine (Betadine) 10 percent solution is stable, safe and packaged in several sizes, including a ½ oz plastic squeeze bottle. The latter is very convenient for travelers but is not available in most pharmacies, undoubtedly because of insufficient demand. Two or three drops per glass or eight to ten drops per liter provides 3 to 4 ppm, which is sufficient to kill coliform bacteria in one or two minutes. Time required for killing viruses and *Giardia* and *Entamoeba* cysts is less clear, but may be as long as 30 minutes in very cold water; less at room temperature. The taste is quite tolerable.

Recently I contacted the manufacturer, Purdue Frederick, and learned that almost no inquiries have been received in the United States about povidone-iodine's use for drinking water purification, but that it is included for this purpose in emergency military kits in several other countries. An additional advantage, of course, is its value as a wound disinfectant and for the treatment of the various sores and superficial fungal infections so common to travelers.

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1. Zemlyn S, Wilson WW, Hellweg PA: A caution on iodine water purification (Information). West J Med 135:166-167, Aug 1981

Correction: Formula to Calculate Serum Osmolality

IN THE AUGUST Medical Staff Conference, "Acute Methanol Poisoning," the formula for calculating serum osmolality was printed incorrectly on page 125. It should read as follows:

$$2 \times \text{Na} + \frac{\text{BS}}{18} + \frac{\text{BUN}}{28} = 285 \pm 4.2 \text{ mOsm/kg H}_2\text{O}.$$

Na = serum sodium concentration, mEq per liter
BS = blood sugar concentration, mg per dl
BUN = blood urea nitrogen concentration, mg per dl